

DOCKET NO. D-1996-042-3

DELAWARE RIVER BASIN COMMISSION

**Southeastern Pennsylvania
Ground Water Protected Area**

**Paunnaussing Founders, Inc. – Lookaway Golf Club
Groundwater and Surface Water Withdrawal
Buckingham Township, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted by DelVal Soil & Environmental Consultants, Inc. on behalf of Paunnaussing Founders, Inc. – Lookaway Golf Club (Lookaway) to the Delaware River Basin Commission (DRBC or Commission) on March 2, 2016 (Application), for a renewal and approval of an allocation of groundwater and surface water and review of a groundwater and surface water withdrawal project in the Ground Water Protected Area of Southeastern Pennsylvania. This docket was previously approved by the Commission on February 28, 2007.

The Application was reviewed for continuation and approval under Section 3.8 and for a withdrawal permit under Section 10.3 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action on this permit. A public hearing on this project was held by the DRBC on August 10, 2016.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an existing supply of groundwater and surface water to irrigate the Lookaway golf course from two existing Wells PW-2 and PW-3 and an existing, off-stream constructed pond. The total allocation of groundwater will remain 6.2 million gallons per month (mgm). Lookaway is not requesting an increase in groundwater withdrawal allocation from that contained in its prior approval.

2. Location. The project wells are located in the Mill Creek Watershed, in Buckingham Township, Bucks County, Pennsylvania. Wells PW-2 and PW-3 are completed in the Brunswick Formation. Mill Creek near the project site is designated by the Pennsylvania Department of Environmental Protection (PADEP) as supporting Warm Water Fishes (WWF) and Migratory Fishes (MF).

Specific location information has been withheld for security reasons.

3. **Service area.** The project withdrawals will only be used to supply water to the docket holder's golf course irrigation system.

4. **Physical features.**

a. **Design criteria.** Lookaway golf course is an 18-hole golf course located on 250 acres, and consists of approximately 32 acres of fairways and tees and 5 acres of greens. The allocation of groundwater and surface water herein will only serve golf course irrigation. The potable water at the golf course's clubhouse is provided by an existing on-site well (PW-1) which only serves the clubhouse. The withdrawals from this well are less than 750 gallons per day (gpd) when the golf course is in operation.

The irrigation system is sourced from an off-stream constructed pond supplemented by two existing Wells PW-2 and PW-3. The 11.0 million gallon (mg) capacity pond is also designed to capture surface water runoff, which minimizes groundwater use. The off-stream pond provides up to 55 days of water storage.

The average and maximum demand is 0.1 million gallons per day (mgd) and 0.2 mgd, respectively. The docket holder does not estimate an increase in the 10 year average or maximum daily demand. The allocation of 6.2 million gallons per month (mgm) should be sufficient to meet the future demands of the Lookaway system.

b. **Facilities.** The docket holder's existing project wells and pond have the following characteristics:

WELL NO.	DEPTH (FEET)	CASED DEPTH/ CASING DIAMETER	PUMP CAPACITY (GPM)	YEAR DRILLED
PW-2	350	63' / 8"	80	1996
PW-3	530	42' / 8"	80	1996

POND ID.	PUMP CAPACITY (GPM)	STORAGE CAPACITY (MG)	YEAR CONSTRUCTED
Pond	1,400	11	1997

The wells and pond are metered.

The project facilities are above the 100-year flood elevation.

The irrigation system is presently not interconnected with any other distribution system.

c. **Other.** Wastewater from the site is conveyed to an on-site septic system.

- d. Cost. There are no construction costs associated with this renewal.

B. FINDINGS

The project is located within the Southeastern Pennsylvania Ground Water Protected Area delineated by the DRBC pursuant to Compact Section 10.2. The project is designed to conform to the requirements of the *Water Code, Water Quality Regulations and Ground Water Protected Area Regulations (GWPAR)* of the DRBC.

Review and analysis of the application pursuant to Section 6d. of the *Ground Water Protected Area Regulations (GWPAR)* result in the following:

1. The withdrawal is consistent with the Commission's Comprehensive Plan and the policies and purposes of these regulations.
2. Opportunities to satisfy water requirements on a timely basis from existing available supplies and facilities have been explored and found infeasible.
3. The withdrawal, in conjunction with other withdrawals in the applicable ground water basin, should not exceed withdrawal limits of the groundwater basin, aquifer or aquifer system.
4. The withdrawal should not significantly impair or reduce the flow of perennial streams in the area.
5. Existing ground and surface water withdrawals should not be adversely impacted, or will be otherwise assured of adequate supplies in accordance with the requirements of Section 10 of the *GWPAR*. There have been no reported complaints of well interference since the first approval of this renewal project. No adverse impact is anticipated due to continued operation of this project.
6. The withdrawal should not cause substantial, permanent adverse impact to the overlying environment.
7. The docket holder adopted and will implement conservation and management programs as required by Section 7 of the *GWPAR*.

The docket holder's withdrawals were approved by the Commission in Docket No. D-1996-042-1 and continued in Docket No. D-1996-042-2 on February 26, 1997 and February 28, 2007, respectively. Issuance of this docket will continue the approval of this groundwater and surface water withdrawal project.

Lookaway is located in the Mill Creek Neshaminy Creek subbasin, where total net annual ground water withdrawal (156.29 mgd) is less than the withdrawal limit set in Section 6.I of the *GWPAR* (1,565 mgd). The applicant is requesting a monthly allocation of 6.2 mgd, which equates

to 37.2 million gallons per year (mgy) (6 months x 6.2 mgy), a fraction of which will be returned to ground water. However, even if no water from this project were returned to ground water, the total net annual ground water withdrawal from this subbasin would remain below the withdrawal limits set in Section 6.I of the *GWPAR*. Therefore, the withdrawals from the project wells, in conjunction with other withdrawals in the subbasin, are in accordance with the requirements of Section 6.I of the *GWPAR*.

The project is designed to conform to the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

Lookaway shall pay for surface water use, if the irrigation water withdrawal exceeds the amount of the total combined well withdrawals, in accordance with the provisions of *Administrative Manual Part III Basin Regulations – Water Charges*.

The DRBC estimates that the project withdrawals, used for the purpose of golf course irrigation, result in a consumptive use of 90 percent of the total water use. The DRBC definition of consumptive use is defined in Article 5.5.1.D of the *Administrative Manual – Part III – Basin Regulations – Water Supply Charges*.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

I. Effective on the approval date for Docket No. D-1996-042-3 below, Docket No. D-1996-042-2 is terminated and replaced by Docket No. D-1996-042-3.

II. The project as described in the Section A “Physical features” is approved pursuant to Section 3.8 of the *Compact* and is granted this withdrawal permit pursuant to Section 10.3 of the *Compact* and *GWPAR*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s. Within 60 days (November 14, 2016), the permit holder shall provide written confirmation to the Commission that it has registered and reported with PADEP all surface and groundwater sources described in this permit in accordance with the Pennsylvania Regulations (Title 25 - Environmental Protection, [25 PA. CODE CH. 110], Water Resources Planning).

b. The wells, pond and operational records shall be available at all times for inspection by the DRBC.

c. The wells and pond shall be operated at all times to comply with the requirements of the *Water Code* and *Water Quality Regulations* of the DRBC.

d. During any month, the total withdrawal from the wells and pond shall not exceed 6.2 mgm or 37.2 mgy (6.2 mgm x 6 months). The wells and pond shall not be pumped above the maximum instantaneous rate and monthly allocation as indicated below:

WELL OR INTAKE NO.	INSTANTANEOUS RATE (GPM)	MONTHLY ALLOCATION (MILLION GALLONS)
PW-2	80	3.1
PW-3	80	3.1
Pond	1,400	6.2

e. The docket holder shall pay for surface water use, if the irrigation water withdrawal exceeds the amount of the total combined well withdrawals, in accordance with the provisions of *Administrative Manual Part III Basin Regulations – Water Charges*.

f. The wells shall be equipped with readily accessible capped ports and minimum ½ inch inner diameter (ID) drop pipes so that water levels may be measured under all conditions. Existing wells are to be similarly equipped, where possible, with readily accessible ports and ½ inch ID drop pipes as repairs or modifications are made at each existing well.

g. The project withdrawals shall be metered with an automatic continuous recording device that measures to within 5 percent of actual flow. An exception to the 5 percent performance standard, but no greater than 10 percent, may be granted if maintenance of the 5 percent performance is not technically feasible or economically practicable. A record of daily withdrawals shall be maintained, and monthly totals shall be reported annually by June 30, to the PADEP. Withdrawal records shall be available at any time to the Commission if requested by the Executive Director.

h. Each new water service connection shall include a water meter in accordance with the DRBC's Resolution No. 87-7 (Revised).

i. The docket holder shall implement to the satisfaction of the PADEP, a continuous program to encourage water conservation in all types of use within the facilities served by this docket approval. The docket holder will report to the PADEP, on the actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

j. The docket holder shall incorporate and implement reasonable conservation practices and measures consistent with efficient utilization of water resources.

k. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

l. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this permit. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact* and the *GWP*AR.

m. A long-term monitoring program is required to obtain data on ground water and surface water hydrologic conditions in the project area. The docket holder shall continue to implement the long-term monitoring program as submitted by the docket holder in a report dated January 10, 1997, plus the Yerkes well and pond. This program will include the following:

1. **Ground Water Level Monitoring** – Lookaway shall monitor thirteen (13) wells and a pond identified in the above referenced letter to estimate annual ground water fluctuations caused by seasonal changes and/or production well pumping, and detect water level declines that may affect the performance of public and private wells in the area of the Lookaway wells.

2. **Reports** - All monitoring data, including records required in Conditions “f.” and “l.” herein shall be submitted to the Commission annually, due by April 1. The docket holder is encouraged to submit the annual report electronically. The report shall be prepared by a hydrogeologist and shall assess the effects of well withdrawals on hydrologic conditions in the area. This report shall include an evaluation of the monitoring data required by this docket approval and such information as deemed appropriate by the hydrogeologist or required by the Executive Director.

3. The Executive Director may modify the monitoring program or temporarily suspend or modify this docket at any time if review of the hydrologic data and/or any other information indicates such action is necessary or appropriate.

m. No water service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

n. The docket holder shall implement its Water Conservation Plan as approved by PADEP, and shall report to the PADEP on actions taken pursuant to this program and the impact of those actions as requested by the PADEP.

o. The docket holder shall implement to the satisfaction of the PADEP, a drought or other water supply emergency plan.

p. No new water service connections shall be made to premises connected to sewerage systems which are not in compliance with all applicable effluent limits contained in State permits and the *Water Quality Regulations* of the Commission.

q. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

r. The docket holder is permitted to provide the water approved in this docket to the areas included in Section A.3. Area Served of this docket. Any expansion beyond those included in Section A.3. Area Served is subject to DRBC review and approval in accordance with Section 3.8 of the *Compact*.

s. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

t. The issuance of this docket approval shall not create any private or proprietary rights in the water of the Basin, and the Commission reserves the rights to amend, alter or rescind any actions taken hereunder in order to insure the proper control, use and management of the water resources of the Basin.

u. If the monitoring required herein or any other relevant data or information demonstrates that the operation of this project is interfering with or otherwise impairing existing uses of ground or surface water, or if the permit holder receives a complaint from an existing ground or surface water user within the zone of influence of the withdrawal alleging such interference or impairment, the permit holder shall immediately notify the Executive Director, and unless excused by the Executive Director, shall investigate the demonstrated or alleged impacts. For purposes of this condition, notification shall mean either (a) electronic transmittal of written notice to the Executive Director via email (using addresses posted on the DRBC website); or (b) written notice to the Executive Director and a telephone call to the Project Review Section at 609-883-9500, ext. 216. (Oral notification must always be accompanied by immediate written notification directed to the Executive Director.) In addition, the permit holder shall provide written notice to all potentially affected water users of the permit holder's responsibilities under this condition. **Any well or surface water supply that is impaired as a result of the permit holder's project withdrawal shall be repaired, replaced or mitigated at the permit holder's expense.** The scope of the options to consider for repair, replacement and/or mitigation shall not be limited solely to those that are owned, operated, or controlled by

the project sponsor. An investigation report and/or mitigation plan prepared and certified by a licensed professional engineer and/or a licensed professional geologist shall be submitted to the Executive Director as soon as practicable following notice of the demonstrated or alleged impairment consistent with this paragraph. The Executive Director shall make the final determination regarding the scope and sufficiency of the investigation and the extent of any mitigation measures that may be required. Where ground and surface waters are rendered unavailable, unusable, or unsuitable for the pre-existing use, the Executive Director may direct the permit holder to take interim actions to mitigate such impacts, pending completion of the investigative report and any long-term repair, replacement or mitigation.

v. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

w. For the duration of any drought emergency declared by either Pennsylvania or the Commission, water service or use by the docket holder pursuant to this approval shall be subject to the prohibition of those nonessential uses specified by the Governor of Pennsylvania, the Pennsylvania Emergency Management Council, PADEP, or the Commonwealth Drought Coordinator to the extent that they may be applicable, and to any other emergency resolutions or orders adopted hereafter by the Commission.

x. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the *Rules of Practice and Procedure*. In accordance with Section 15.1(p) of the *Delaware River Basin Compact*, cases and controversies arising under the *Compact* are reviewable in the United States district courts.

BY THE COMMISSION

APPROVAL DATE: September 14, 2016

EXPIRATION DATE: September 14, 2026